Claims 1-18 and 20, filed Aug. 21, 2003, are currently canceled by an applicant.

Claim 19, filed Aug. 21, 2003, is currently amended.

Claims 21-33 are added as the new claims.

What is currently claimed is:

1. (canceled) A space saving cooking appliance comprising:

an outer case with afront and rear surface, said rear surfece being prism shaped with an apex for fitting an interior room corner, said front surface being arcuate;

at least one cylindrical cooking space contained in said case;

at least one access means into said cylindrical cooking space for inserting and removing food;

at least one means for supplying thermal energy to said food.

2. (canceled) The space saving cooking appliance of claim 1 wherein said means for supplying thermal energy is a microwave source.

3. (canceled) The space saving cooking appliance of claim 2 further comprising at least one alternate cooking space.

4. (canceled) The space saving cooking appliance of claim 3 wherein said alternatecooking space is atoaster.

5. (canceled) The space saving cooking appliance of claim 3 wherein said alternate cooking space is a rotisserie.

6. (canceled) The space saving cooking appliance of claim 3 wherein said alternate cooking space is coffee maker.

7. (canceled) The space saving cooking appliance of claim 3 wherein said alternate cooking space is a broiler.

8. (canceled) The space saving cooking appliance of claim 3 wherein said alternate cooking space is a grill.

9. (canceled) The space saving cooking appliance of claim 1 wherein said access means

is on said is on arcuate surface.

10. (canceled) The space saving cooking appliance of claim 9 wherein said access means is a door with latch.

11. (canceled) A space saving cooking appliance with a microwave oven of the type used to cook or heat food comprising a front arcuate room-facing surface with an arcuate door allowing insertion and removal of food; a cylindrical interior region formong acooking space; a prism shaped outer case with a flat top and bottom surrounding the cylindrical cooking space, this outer case having a rear vertical apex matching a room corner, this case mating with the front arcuate room-facing surface.

12. (canceled) The space saving cooking appliance of claim 11 further comprising at least one side compartment containing at least one auxiliary cooking appliance.

13. (canceled) The space saving cooking appliance of claim12 wherein said auxiliary cooking appliance is a toaster.

14. (canceled) The space saving cooking appliance of claim 12 wherein said auxiliary cooking appliance is a rotisserie.

15. (canceled) The space saving cooking appliance of claim 12 wherein said auxiliary cooking appliance is a broiler.

16. (canceled) The space saving cooking appliance of claim 12 wherein said auxiliary cooking appliance is a grill.

17. (canceled) A space saving cooking appliance with a microwave oven of the type used to cook or heat food comprising a front arcuate room-facing surface with arcuate door allowing insertion and removal of food; a cylindrical interior region forming a cooking space; a half-cylinder shaped outer case witha flat top and bottom surrounding the cylindrical cooking space, this case mating with the front arcuate room-facing surface.

18. (canceled) The space saving cooking appliance of claim 17 further comprising at least one side compoartment containingf at least one auxiliary cooking appliance.

19. (currently amended) **[**A space saving cooking appliance comprising a partially spherical outer shell with a flat bottom containing a partially spherical cooking space, said spherical cooking space also having a flat bottom parallel to said flat bottom of a said outer shell**]**

An ellipsoidal microwave oven comprising:

An oval outer shell 14;

A microwave cavity with an oval sidewall 44, flat top 13 and flat bottom 11A and 11B;

A machine compartment located above microwave cavity with antenna 420 located at the center of said flat top 13;

Microwaves emitted spherically from antenna 420 on sidewall 44, on flat bottoms 11A and 11B;

A front oval door 34 for inserting and removing food;

20. (canceled) The space saving cooking appliance of claim 19 further comprising an arcuate access port for the incertion and removal of food.

21. (new) The ellipsoidal macrowave oven of claim **19** wherein a shape of said oval outer shell 14 is based on a form of ellipsoid.

22. (new) The ellipsoidal macrowave oven of claim **21** wherein said ellipsoid is formed by rotation of an ellipse around its vertical axis; said ellipse is built on two axes, horizontal and vertical, where their ratio is within 1.0 and approximately 2.0.

23. (new) The ellipsoidal microwave oven of claim **19** wherein said ellipsoid has a flat horizontal bottom; said horizontal bottom is located above lower point of said ellipsoid for approximately 20 percent of its height.

24. (new) The ellipsoidal microwave oven of claim **19** wherein said oval sidewall 44 has a shape of a barrel to reflect microwaves, emitted spherically from antenna 420.

25. (new) The ellipsoidal microwave oven of claim **24** wherein the said barrel is formed by revolving a curve 44 around vertical axis of said ellipsoid.

26. (new) The ellipsoidal microwave oven of claims **24** and **25** wherein said curve 44 is build on points **a-b-c-d-e** found as the reflective points to reflect said microwaves radially from said barrel-shaped sidewall 44 downward onto said bottom11A, where food mostly remains underheated.

27. (new) The ellipsoidal microwave oven of claim **26** wherein said corrugated part 11B has a series round grooves to reflect radially microwaves from said round grooves to the central lower part of cavity to enhance cooking power in said part of the cavity.

28. (new) The ellipsoidal microwave oven of claim **28** wherein the center-bound slopes of said round grooves 11B are leant under different angles: the slopes of most centrally

placed rings are more steep while the most outer ones are more slopping in order to converge reflected from said round grooves microwaves into the most low zone of the cavity.

29. (new) The ellipsoidal microwave oven of claim **19** wherein said microwaves, radially emitted from a single antenna 420 on three different zones - on said oval sidewallwall 44 (**a-b-c-d-e** zone), on said bottom 11A (**f** zone) and on most central part of said bottom 11A (**g-h-i-h-g** zone), create a non-uniform microwave density throughout the cavity, concentrating said density in most needed spots and keeping it thin where it is not needed.

30. (new) The ellipsoidal microwave oven of claim **29** wherein said microwave density is most high (except antenna's emission zone) over said bottom 11A (**g-h-i-h-g** zone), where all three flows of said microwaves - directly emitted from said antenna 420, reflected from said oval sidewall 44 and reflected from said round grooves 11B - have been finally come together, creating the most dense microwave zone to be able to penetrate and heat most deep portions of food.

31. (new) The ellipsoidal microwave oven of claim **19** wherein a shape of the said oval door 34 for inserting and removing food complies with the general shape of said microwave oven's ellipsoid, including door's window glass and microwave shield.

32. (new) The ellipsoidal microwave oven of claim **31** wherein said front door 34 opens and closes in an up-and-down manner without a handle; said front door opens up automatically by pressing a button on control panel, and closes pushing the door down by hand.

33. (new) The ellipsoidal microwave oven of claims **19** wherein said front door 34 is windowless.

Once again about applicant's a non-uniform distribution concept

In conventional box-like cavities, standing microwaves create a chaotic pattern of a coarse-scale microwave uniformity throughout the cavity but whith numerous relatively small-scale cold and hot spots, i.e. with thin and thick microwave densities. To overcome this small-scale non-uniformity, or ununiform density, it was invented long ago a turntable to continually change the locations of those small hot and cold spots. However, this system is not effective, because food is under relatively low heat power and threrefore heats up slowly.

An applicant went by radically different way - he invented such a cavity which creates a large-scale **non**-uniformity, concentrating high microwave density (and heat power) only in **needed** locations and leaving it low in unnecessary locations. This is clearly seen on Fig.15, where all standing microwave rays finally get the lower center part of cavity, where the food usually places.

As to the problem with small-scale cold and hot spots in applicant's designs, the high concentration of all microwave rays in relatively small space - just immediately over the center part of bottom - would exclude all those unwanted cold spots, turning them into hot ones and therefore sharply decreasing the cooking time.

In the lower center part of cavity, where food usually places, the microwave density, i.e. heat power, is most high and food heats up much quicker. This can be possible only with a vertically symmetrical cavity and with special shapes of cavity's sidewall and bottom. This is the second essence of the invention. The first essence of it is the weight economy due to the highly effective outer shell form - ellipsoid, and sphere as a particular case of ellipsoids.

The matters (claims 31, 32, 33) about the door which opens and closes in an up-and-down manner and its window are not newcomers. They are discribed in provisional applications.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as a first class mail in an envelope addressed to:

COMMISSIONER FOR PATENTS
P. O. Box 1450
Alexandria, Virginia 22313-1450

on September 16, 2005

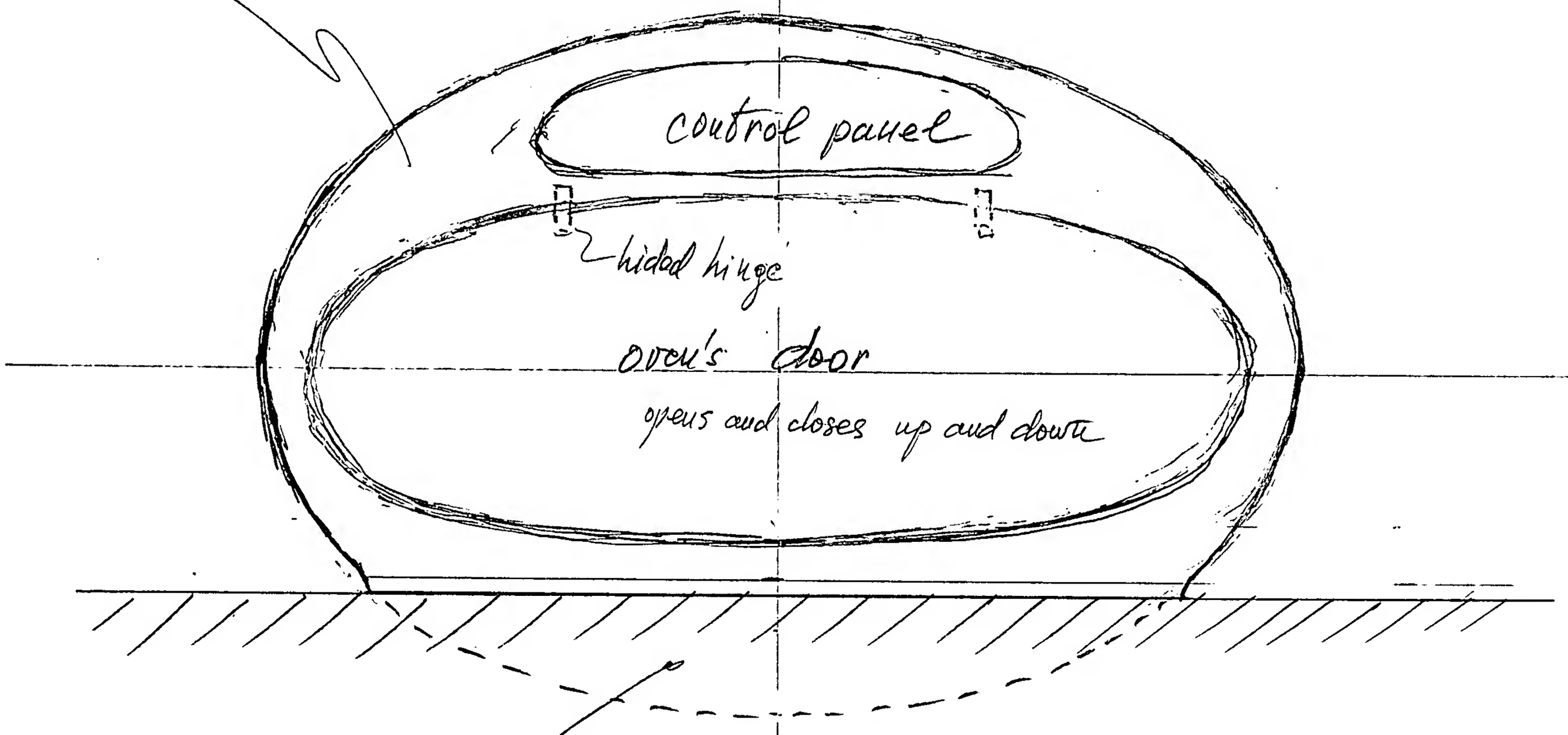
Zenon Rypan

(signature)

R **Zenon Rypan**
2636 W Winona St Apt 3E
Chicago, IL 60625-2532

This is a preliminary sketch of ellipsoidal oven
Built on axis ratio 1.5:1.0

Front view



For next response
all Figures on new ellipsoidal oven will be provided, with full details, made professionally.